

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
11 November 2004 (11.11.2004)

PCT

(10) International Publication Number  
**WO 2004/096371 A1**

(51) International Patent Classification<sup>7</sup>: **A62D 3/00**

PII, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(21) International Application Number:  
PCT/CZ/2004/000024

(22) International Filing Date: 28 April 2004 (28.04.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
PV 2003-1220 30 April 2003 (30.04.2003) CZ

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted  
a patent (Rule 4.17(ii)) for the following designations AE,  
AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,  
CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE,  
EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,  
JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,  
MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM,  
PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,  
TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM,  
ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA,  
SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ,  
BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE,  
BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent  
(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
SN, TD, TG)
- of inventorship (Rule 4.17(iv)) for US only

**Published:**

- with international search report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(71) Applicants (for all designated States except US): USTAV  
CHEMICKYCH PROCESU AV CR [CZ/CZ]; Rozvo-  
jova 135, 165 02 Praha 6 - Suchbát (CZ). ZDRAVOTNI  
USTAV SE SIDLEM V OSTRAVE [CZ/CZ]; Partyzanske  
nam. 7, 702 00 Ostrava (CZ).

(72) Inventors; and

(75) Inventors/Applicants (for US only): PEKAREK,  
Vladimir [CZ/CZ]; Malinova 29, 106 00 Praha 10 (CZ).  
HAPALA, Petr [CZ/CZ]; Paseky 465, 739 11 Frydlant  
nad Ostravici (CZ). FISEROVA, Eva [CZ/CZ]; Nad  
Mohylou 1094, 165 00 Praha 6 (CZ).

(74) Agent: HAKR, Eduard; Traplová-Hakr-Kubát, Law and  
Patent Offices, Prístavní 24, 170 00 Praha 7 (CZ).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,

(54) Title: METHOD FOR DEHALOGENATION DETOXICATION OF HALOGENATED AROMATIC AND/OR CYCLIC  
COMPOUNDS

(57) Abstract: A method for dehalogenation detoxication of halogenated aromatic and/or cyclic compounds, based on the fact that  
at least one halogenated aromatic and/or cyclic compound is heated on a support matrix in a closed system at a temperature of 200  
to 500 °C in the presence of copper in metallic form and/or in the form of copper compounds, a hydrogen donor, carbon and at least  
one additional reducing substance, capable of reducing cupric and cuprous ions to elemental copper at the above temperature.

WO 2004/096371 A1